Takeoffs, Landings



Naval Aviation News is staring the big 8-0 in the face. During those 80 years. the magazine has heralded the contributions of the many individuals, events and technology changes that have made Naval Aviation what it is today. From long-term participation like Grampaw Pettibone to short-lived experiments like the "Pogo" aircraft, all have left their mark on this profession. The magazine staff searched the archives to put together a pictorial history of the comings and goings of Naval Aviation's participantsreported from the onionskin pages of the 15 December 1917 Weekly Bulletin to the slick pub-

lication of today. We invite our

readers to join us in reviewing Naval Aviation's progress during our eight decades of publication.

Illustration by Ted Williams

From Wood, Wire and Fabric . . . To Software, Sensors and Composites

aval Aviation entered the 1930s with the new Boeing F4B-1 fighter, which flew from the flight decks of Langley (CV 1) and Lexington (CV 2). New aircraft began to take form during this decade; the most obvious design change was the transition from biplane to single-wing. During WW II, carrier-based dive-bombers, such as the Douglas SBD Dauntless, were engaged in operations against Japanese forces in the Pacific. The F4F Wildcat, Grumman's first monoplane, and the F6F Hellcat were outstanding fighters in the war; after the war the F8F Bearcat became one of the best piston-engine fighters to see operational naval service. Developed to WW II specifications for a carrier-based dive-bomber and torpedo carrier, the Douglas A-1 Skyraider was too late for service in that conflict, but proved to be a versatile air weapon in the Korean and Vietnam wars. Computer age technology is responsible for many advanced aircraft in today's naval inventory. When the Grumman F-14 Tomcat joined the fleet in 1972, it became the Navy's supreme fighter. In 1983 the McDonnell Douglas

F/A-18 Hornet strike fighter entered operational service as a replacement for aging fighter and attack aircraft.

and Waveoffs



Deadly Dive-Bombers

F8F



Dangerous Cats





TA-4J

F2B-1

Cats, Traps and Barricades

It Keeps Going . . . and Going

In 80 years, many aircraft have come and gone. The A-4 *Skyhawk* is one of a few that has stood the test of time, still flying today 43 years after its rollout in 1954.

Since the inception of Naval Aviation, the technology for launching aircraft from a ship has consistently evolved and improved—from the first tests of compressed-air catapults in 1912, to the flush-deck hydraulic

catapults of the 1930s, to today's steam catapults first implemented in the early 1950s. The vision of an O2U amphibian ready to launch from a battleship in the 1930s is unfamiliar today, replaced by the more modern image of an F-8 *Crusader* launched using a steam catapult. The concept of arrested landings has remained basically the same since the beginning; today's hydraulically controlled arresting wires still reflect the heritage of their early, weighted cousins, and the tailhook on a F2B-1 in 1927 is similar to that used today. The development of shipboard landing aids—from the mirrored version shown here reflecting a *Crusader* and being used by an F4D *Skyray* preparing to land aboard *Essex* (CVA 9), to today's Fresnel Lens Optical Landing System (FLOLS) and the Improved FLOLS now

being tested—greatly improved pilots' ability to recover safely. In the event that a conventional trap was not possible, the development of the emergency barricade provided another option.

F-8U









It Came from Beneath the Sea

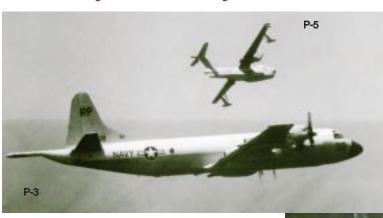


Planes that Floated

K-type airship

Ships that Flew

Waterways to Runways



XS-2

The seaplane was a keystone of Naval Aviation from its earliest days. The launch of an XS-2 float plane from the submarine S-1 in 1926 was an early experiment in the feasibility of such operations. The PBY Catalina became famous for its stalwart service as a patrol plane during WW II, a role that was carried on through the last operational seaplane, the P-5 Marlin, which bequeathed its patrol duties to the P-3 Orion in the 1960s. Lighter-than-air craft also served well in a patrol capacity, as demonstrated by a K-type airship escorting a convoy in 1943. A F9C Sparrowhawk being brought aboard Akron illustrates the Navy's experiments with using airships to carry, launch and recover aircraft. The last Navy airship flew in 1962.

The Flying Trapeze

XF9C-1







ernon Pugh



Leatherneck Lift





Dip and Drag



Advances in aircraft technology during WW II included some interesting experiments, such as Vought's V-173 "Flying Flapjack" research aircraft, leading to the similarly configured XF5U fighter, later designated F5U. Rotary-wing designs experienced healthy growing pains

before reaching the level of modern-day helicopters, which include Sikorsky's CH-53D Sea Stallion, MH-53E Sea Dragon and SH-60F Seahawk, serving in heavy assault transport, minecountermeasures and carrier-based antisubmarine warfare roles.



Developments in the 1950s produced oddball designs like the Convair XFY-1 "Pogo" vertical takeoff and landing aircraft and the Hiller

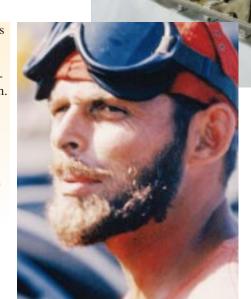
It Seemed Like a Good Idea at the Time XROE-1 "Rotorcycle." New families of faster and more sophisticated vertical flight aircraft began to appear in the 1970s with the British-designed AV-8 *Harrier*, followed in the 1980s by Bell

Helicopter's XV-15 tilt-rotor aircraft predecessor of today's V-22 *Osprey*.



People: The Hub of Naval Aviation

Through all the developments in technology, operations and policy in the last 80 years, there has been one constant—the people who make up Naval Aviation. Despite all the outward changes—different flight gear, facial hair and haircuts, plus the acceptance of women in Naval Aviation—people always have been and will continue to be the hub around which Naval Aviation revolves.





PH1 William A. Shayka

Dilbert Debuts

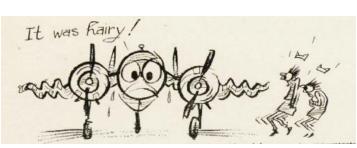
During WW II, artist Lt. Robert Osborn created more than 2,000 safety posters, which were liberally displayed throughout the fleet in hangars, ready rooms and aboard ships. His cartoon characters "Dilbert the Pilot" and "Spoiler the Mechanic" reminded Naval Aviation personnel what not to do while flying or fixing airplanes. Dilbert's name became a standard when describing someone who had screwed up, and is still heard today. Using these characters, Osborn also produced "Sense" pamphlets which taught common sense safety rules on topics such as "Carrier Sense" and "Helicopter Rescue Sense."



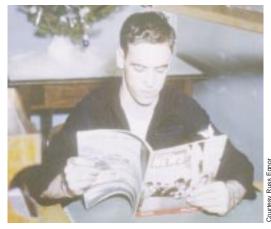
Jumpin' Jehoshaphat!

Grampaw Pettibone

Since his first appearance in the 15 January 1943 issue of the *BUAER News Letter* (the magazine's predecessor), Grampaw Pettibone and *Naval Aviation News* have become synonymous. The cartoon character was imagined by Commander Seth Warner and drawn by artist Lt. Robert Osborn, when they were assigned to the Bureau of Aeronautics' Training Division during WW II, to help reduce a growing aircraft mishap rate. Osborn brought to life a character they envisioned as a cantankerous old Naval Aviator railing against present-day flyers whose unsafe actions cause accidents. Osborn drew the Gramps column for more than 51 years until the artist retired in the May–Jun 1994 issue. Captain Ted Wilbur, a retired Naval Aviator and well-known artist, continues the "Sage of Safety" tradition.



Naval Aviation News



Eighty years ago, this publication was created for the people of Naval Aviation. From the outset, you, our readers, have helped keep the magazine the premier source of Naval Aviation information. From Sailors like PH3 Herman Schroeder in the photo lab at NAS Hutchinson, Kans., in 1944, to today's officers and enlisted personnel, our readership helps keep the magazine content fresh and focused. Our look has evolved to keep up with the times; even the original *Life* magazine-style logo has undergone several modernizations. And *Naval Aviation News* will endure as the flagship publication of Naval Aviation—chronicling the impact of its people, operations, policy and history.



You can have her but I expect loving care